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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,344

05/23/2005

Jan De Kroon

4662-254

6496

23117 7590 10/06/2009  
NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

HAIDER, SAIRA BANO

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,344	<b>Applicant(s)</b> DE KROON ET AL.	
	<b>Examiner</b> SAIRA HAIDER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 8-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 8-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/27/2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 5, 8, 18, 12-17, 22-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Joachimi et al. (WO 2000/39192) in view of Hofmann (US 3,798,115).

4. For purposes of the rejection the examiner refers to the English language equivalent US 6,566,486.

5. Joachimi discloses branched polyamide molding materials that are applied to polyolefin layers to form multilayer films (col. 2, line 43 to col. 3, line 25; col. 6, lines 15-23). Blow molding is noted as a preferred production method for the multilayer films (col. 5, line 64 to col. 6, line 7). Joachimi fails to disclose suitable polyolefin layers such as polypropylene or LLDPE, as claimed. Thus attention is directed to the Hofmann reference which discloses blow molding of a sandwich laminate comprising as the outer layer polyamide, an intermediate layer of a mixture of polyamide and polypropylene and an innermost layer of polypropylene (abstract; Example 1). Wherein Hofmann exemplifies the following film thicknesses: polyamide 40 microns, polypropylene/polyamide 15 microns, and polypropylene 50 microns (Example 1). Thus yielding a total thickness

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of 105 microns. The polypropylene of Hofmann can have an intrinsic viscosity that is high or low, thus the reference readily envisages both linear and branched types (col. 2, line 56 to col. 3, line 4).

6. In view of the foregoing, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the branched polyamide of Joachimi in the multilayer sandwich laminate of Hofmann, in order improve the existing product of Hofmann. Wherein the branched polyamide of Joachimi exhibits very high melt viscosities at low shear rates, as are required in blow molding related processes (col. 2, lines 5-9). Thus resulting in an improved sandwich laminate of Hofmann, wherein it would be obvious to one of ordinary skill to create a larger variety of laminates as per the teachings of Joachimi and Hofmann given the improved properties.

7. In reference to claim 17, Joachimi and Hofmann in combination fail to disclose that the blown film has a blow-up ratio of from 20 to 40 %. It would have been obvious to one of ordinary skill in the art at the time of the invention to control the blow-up ratio, wherein the blow-up ratio of the blown film is a readily manipulatable parameter. The motivation to modify the blow-up ratio is to control the diameter of the final product while blown in the die or mold cavity, instead of modifying the size of the die or cavity.

8. Claims 1, 5, 9-11, 19-21, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joachimi et al. (WO 2000/39192) in view of Ramesh (US 5,866,214).

9. Joachimi applies as discussed above, but fails to disclose that the polyolefin layer consists of LLDPE. Thus attention is directed towards the Ramesh reference which discloses formation of a multilayer film via blow molding, wherein the outermost layers comprise LLDPE and the inner layer is polyamide (Example 4). Wherein it would have been obvious to include the branched polyamide of Joachimi in the multilayer film of Ramesh in order to utilize a polyamide which exhibits very

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high melt viscosities at low shear rates, as are required in blow molding related processes, and thus ensure effective formation of the film.

10. Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joachimi et al. (WO 2000/39192) in view of Ramesh (US 5,866,214), in further view of Dobreski et al. (US 5,290,866).

11. Joachimi and Ramesh apply as discussed above, but fail to disclose the inclusion of a modified LLDPE. Dobreski discloses a modified LLDPE comprising a 10% mixture of an acrylic polymer (abstract), wherein the modified LLDPE results in films with good tear strength and impact properties (col. 2, lines 20-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the modified LLDPE of Dobreski in the LLDPE layers taught by the combination of Joachimi and Ramesh in order to form a multilayer film having LLDPE layers with good tear strength and impact properties. Regarding the claimed amounts of LLDPE and modified LLDPE, Ramesh exemplifies LLDPE layers with 20% of a modifying polymer (Example 2). Wherein the amount of a modifying polymer is recognized as a result-effective variable because changing it will clearly affect the type of product obtained. Wherein a larger amount of the modified LLDPE of Dobreski will result in an increase in the tear strength and impact properties of the final film. Thus it would have been obvious to one of ordinary skill in the art to utilize the modified LLDPE within the claimed amount so as to produce the desired end results.

### ***Response to Arguments***

12. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAIRA HAIDER whose telephone number is (571)272-3553. The examiner can normally be reached on Monday-Friday from 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James J. Seidleck/  
Supervisory Patent Examiner, Art Unit 1796

Saira Haider  
Examiner  
Art Unit 1796